

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Amend claims 2, 14, 54, and 60 to moot the claim objections and claim rejections under 35 USC §112, second paragraph.
2. Thank the Examiner for the indication of allowable subject matter in claims 4, 9, 12, 16, 23-30, 32, 40, 41, 47-53 and 60.
3. Thank the Examiner for the allowance of claims 22 and 56-59.
4. Respectfully traverse all prior art rejections.

B. PATENTABILITY OF THE CLAIMS

Claims 1-3, 5, 6, 8, 10, 11, 13-15, 17, 18, 20, 21, 31, 33-36, 38, 39, 42-46 and 55 stand rejected under 35 USC 102¹ as being anticipated by U.S. Patent 6,597,679 to Willars. Claims 7, 19 and 37 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 6,597,679 to Willars in view of the admitted prior art (Figure 1 Prior Art). Claim 54 under 35 USC 103(a) as being unpatentable over U.S. Patent 6,597,679 to Willars in view of U.S. Patent 6,507,570 to Holma et al. All prior art rejections are respectfully traversed for at least the following reasons.

The rejected independent claims 1, 13, 33 and 44 each require:

...an IF measurement time interval indication signal indicating a time interval of an established connection in which IF measurements should be carried out by the mobile; ... and

¹ Applicants do not presently intend to swear behind the U.S. Patent 6,597,679 to Willars, but do not waive the right to do so.

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

"the IF measurement means in the mobile carries out the measurements in the indicated time interval".

Using the procedure and structure of these independent claims, the network tells the mobile the time in which the measurements are to be carried out since in the claimed arrangement the mobile does not know the time interval by itself.

On page 4, 1st paragraph of the Office Action, the examiner interprets "slot 104B and information 109 in Fig. 5, 6 of US 6,597,679" of Willars as the time interval indication signal of Applicants' broad claims. In their previous response, Applicants detailed numerous reasons why a similar allegation was incorrect. The Examiner is respectfully urged to consider again and carefully those prior patentability remarks. In addition, Applicants below provide the further insights and considerations for the Examiner's edification, establishing concretely that 104B and 109 of Willars do not indicated the claimed time interval.

1.1: The prior Art Compressed mode does not need an indication of a time slot for IF measurement. Generally, in compressed mode operation, the mobile station KNOWS which of the time slots is the compressed time slot - it does NOT have to receive any indication about this from the network. See in this connection the description of "compressed mode" in the introductory portion of Applicants' specification relating to Fig. 3-1; 3-2 on (original) page 15, 2nd paragraph to page 16, 2nd paragraph. Nothing in Applicants' specification contains any description that the network also HAS to tell the mobile WHICH time slot should be used. See also in this regard the example in Applicants' Fig. 4-1: the IF time slot is PREDETERMINED or DEFAULT.

1.2: Willar's Discussion of Background Art confirms argument 1.1 In col. 4, line 8-15, Willars describes the "prior art" usage of compressed mode in order to illustrate

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

the problem to be solved by Willars, namely, the UTRAN (network controller) defines the slot and DEFINES when the mobile can enter compressed mode, this being done, e.g. by defining one frame M every N frames, i.e. it is enough if the SCHEME (i.e. M out of N) is agreed upon (predefined) and the mobile only gets an indication that it should enter this mode of operation. Thus, even in Willars' background section, for what is described as "current state of compressed mode" in col. 4, line 8, there was NO NECESSITY OR DISCLOSURE for a time interval indication signal as in Applicants' claims.

2.1 Willars' invention (Fig. 7) allows the mobile station to PREDFINE the compressed mode characteristics. In col. 4, line 16-57, Willars describes the problem that different mobiles may require different "compression amounts" (col. 4, line 19) and the requirement for compressed mode will differ from mobile to mobile (col. 4, line 31). Col. 4, line 49-57 of Willars therefore suggests that the compressed mode is CONTROLLED by the MOBILE. What this means can be understood from Willars' col. 29-64: after receiving the measurement order 201, the mobile sends a compressed mode request 202 to the network (col. 8, line 29-32). Among other characteristics, the message 202 can comprise (col. 8, 33-50):

2. the FRAME NUMBER where compressed mode is to start;
4. SLOT DURATION;
5. the NUMBER OF CONSECUTIVE FRAMES;
6. periodic or one shot measurement.

To put it differently, in Willars the mobile tells the network the starting time and the time duration of compressed mode of operation. The network then receives this message and recognizes the compressed mode request characteristics and communicates this to the base station BS1 (col. 8, line 55-62). Then the base station prepares 205 the

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

WCDMA transmission slot (col. 8. line 63) accordingly. ONCE the slot 104B occurs the mobile measures (col. 8, line 66). There is no mention in transmitting information from the network to the mobile of a time slot for compressed mode and it is blatantly apparent why: the mobile BEFOREHAND TOLD THE NETWORK THE NUMBER WHERE COMPRESSION MODE IS TO START (2.) and THE NUMBER OF THE FRAMES (DURATION) (5.). Hence, it is unthinkable that the network would then need to tell the mobile something the mobile already knows !!!!

Therefore it is clear that there is neither a need nor a disclosure of an indication signal from network to mobile in Willars because Willars is based on the idea that it is the mobile which defines the time slot and duration.

2.2 Willars' Information 109 is definitely NOT the indication signal. With a proper understanding of Willars (see above), it is clear that 109 is not the signal for indication of the time interval. See, e.g., col. 8, line 64-67 which describes that once the slot 104B occurs (as explained the mobile has beforehand determined which one it is) the mobile takes the opportunity during the spare time to take or grab the measurement 206 (Fig. 7), i.e. 206 is a signal to be measured by the mobile. Then, col. 9, line 1-2 explains that grabbing 206 is the same as taking the MEASUREMENT 109 in Fig. 6. According to col. 7, line 54, 109 is information during the slot period between frames 104 and 105. Hence, 109 is some kind of information needed FOR THE MEASUREMENT PROCESS but it does NOT INDICATE THE INTERVAL; it just happens to be transmitted in this interval which the mobile knows about because the mobile has defined the interval beforehand.

2.3 Willars' 104B is NOT an indication signal. Having understood that the mobile tells the network the desired time measurement slot number and the duration and that 206 and 109 are merely info for the measurement process, it is also easy to see that

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

Willars' 104B is just the remaining time slot interval of the slot number 104 in which the measurement 109 is taken (Fig. 6). However, the network does not TELL the mobile where the slot 104 or the spare time 104B is BECAUSE THE MOBILE ALREADY KNOWS THIS - SIMPLY BECAUSE THE MOBILE ITSELF TOLD THE NETWORK WHICH ONE TO USE.

Therefore, in Willars where the mobile tells the network the characteristics of the desired compressed mode operation (col. 8, line 59), the mobile simply waits for the time slot No. 103/compressed slot No. 104 (which the mobile has defined beforehand) and the mobile already knows that at the end of 104 the mobile can start the measurement 109/206 during 104B. Thus, in Willars the mobile sends a time interval (frame number) indication information 202 (the compressed mode request 202 with the information 2., 6.) to the network and the network has no role, need, or motivation to AGAIN indicate this to the mobile (a simple acknowledgment 203 (see col. 8, 57) is sufficient). The mobile knows that it can perform the measurement in its desired frame and over its desired number of frames.

In view of the foregoing and other considerations, the Examiner has ample reasons for withdrawing the pending rejections.

C. MISCELLANEOUS

In view of the foregoing and other considerations, the Examiner has ample reasons for withdrawing the pending rejections. All claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.


The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application, including but not limited to extension of time fees.

PETERSSON et al
Serial No. 09/643,653

Atty Dkt: 2789-22
Art Unit: 2661

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,
NIXON & VANDERHYE P.C.

By: 
H. Warren Burnam, Jr.
Reg. No. 29,366

HWB:lsb
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100